

Appl. No. 10/523,331  
Amtd. Dated October 26, 2007  
Reply to Office Action of June 6, 2007

REMARKS

New claim 30 has been added in order to alternately define the invention as disclosed in the specification.

Applicants have amended claims 1, 2, 4, and 5 in order to obviate the Examiner's objections. Applicants submit that these claims are now in condition for allowance.

Without conceding the propriety of the Examiner's position, and solely to expedite prosecution, claim 27 has been cancelled without prejudice or disclaimer.

Applicants respectfully request reconsideration of the Examiner's rejection of claims 1 – 6, 8 – 10, 24 – 26, and 28 - 29 under 35 U.S.C. §103(a). The Examiner has rejected these claims in view of the cited references of *AAPA* in view of *Murakami et al.* (U.S. Patent No. 4,604,140) and Jap. Pat. Pub. No. 05-055758 to Matsushita.

Applicants note that under Section 2143 of the MPEP, in order to establish a prima facie case of obviousness, the Examiner must meet three basic criteria. "First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations." *MPEP §2143 rev. 3* (August, 2005). Applicants' assert that the Examiner has failed to establish a prima facie case of obviousness for at least the

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reason that the prior art reference fails to teach or suggest all of the claim limitations.

Applicants submit that none of the references cited by the Examiner disclose, teach, or suggest providing an insulating layer and a separate metal transfer sheet made of a metallic base and a dissolvee metal layer separate from and un-connected to said insulating layer, forming a conductor pattern over one surface of the transfer sheet, transferring both the transfer sheet and the conductor pattern to the insulating layer, and then removing the metal transfer sheet such that no portion of the metal transfer sheet is removed until the final transfer sheet removal step.

In contrast, Murakami teaches that the metal substrate 1 should be removed prior to transferring the conductor pattern 3 to the insulating film 5. Such a teaching results in the same problems set forth in Applicant's Background of the Invention, namely, stretching and warping. (See page 4 of Applicant's disclosure).

Applicants note that the Court of Appeals for the Federal Circuit has repeatedly held that "It is improper to combine references where the references teach away from their combination." *In re Grasselli*, 713 F.2d 731, 743, 218 USPQ 769, 779 (Fed. Cir. 1983). Here, Murakami clearly teaches away from maintaining the metallic base structure until after the conductor pattern is transferred.

For at least this reason, Applicants submit that the Examiner should withdraw the Murakami reference and place claims 1 – 6, 8 – 10, 24 – 26, and 28 - 29 in condition for allowance.

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In specific regard to claim 2, Applicants submit that the cited references fail to set forth the method including removing both the base material and the dissolvee metal after being attached to the insulating layer. For at least this reason, Applicants submit that the Examiner should withdraw the Murakami reference and place claim 2 in condition for allowance.

In specific regard to claim 4, Applicants submit that the cited references fail to set forth the method including a step of burying an insulating material in the gaps in said formed conductor pattern and subsequently flattening the surface of said transfer sheet such that the surfaces of the conductor pattern and the insulating material are substantially flush. For at least this reason, Applicants submit that the Examiner should withdraw the Murakami reference and place claim 4 in condition for allowance.

In specific regard to claim 5, Applicants submit that the cited references fail to set forth the method including forming an adhesive material over one surface of an insulating layer formed separate from the metal base material prior to the pattern transfer step, wherein the adhesive layer is subjected to the same void forming step as the insulating layer. For at least this reason, Applicants submit that the Examiner should withdraw the Murakami reference and place claim 5 in condition for allowance.

In specific regard to claim 8, Applicants submit that the cited references fail to set forth the method including wherein the dissolvee metal layer and the conductor pattern are made of different metal material, and the step of dissolving and removing the dissolvee metal layer is done by using an etchant

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which is able to dissolve the dissolving metal layer but is unable to dissolve the conductor pattern.

Applicants note that the Examiner, on page 6 of the last Office Action, cites to Column 4, lines 35 – 37 as disclosing this limitation. Applicants respectfully submit that this portion of the Murakami reference fails to disclose anything regarding the use of different materials. Additionally, and in direct contrast to the Examiner's assertion, Column 5, lines 25 – 27 clearly teaches that the metallic film should be formed of the same material as the conductor. Additionally, each one of Examples 1 – 3 in Columns 6 – 8 utilizes a copper conductor and a copper thin film.

For at least this reason, Applicants submit that the Examiner should withdraw the Murakami reference and place claim 8 in condition for allowance.

Finally, Applicants note that the Examiner failed to address newly added claim 29 in the last Final Office Action. Accordingly, Applicants respectfully request that it be addressed in response to this Amendment.

The Examiner's remaining references cited but not relied upon, considered either alone or in combination, also fail to teach applicant's currently claimed invention. In light of the foregoing, Applicants respectfully submit that all claims now stand in condition for allowance.

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In the event that it is deemed necessary, the Commissioner is hereby authorized to charge any fees due or to credit any overpayment to Deposit Account No. 50-3891.

Date: 11/5/07

Respectfully submitted,

(Reg. #37,607)

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